



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,638	03/24/2004	Takashi Nose	P/2278-38	3905

2352 7590 10/15/2007  
OSTROLENK FABER GERB & SOFFEN  
1180 AVENUE OF THE AMERICAS  
NEW YORK, NY 100368403

EXAMINER
----------

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

10/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/807,638

Applicant(s)

NOSE, TAKASHI

Examiner

Leonid Shapiro

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 12, 13, 27, 28 and 36 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 17-26 and 29-35 is/are allowed.
- 6) ☒ Claim(s) 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

This application has claims 12-13,27-29,36 directed to non-elected without traverse. Accordingly, claims 12-13,27-29,36 need to be cancelled.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Kwon (6,486,930 B1).

As to claim 14, Kwon teaches a panel used in a hold type image display apparatus (col. 1, lines 7-13) comprising:

a plurality of data lines (fig. 5A, D1-Dn);

a plurality of gate lines (fig. 5A, G1-Gn), and first and second type pixels

located at intersections between said data lines and said gate lines, every one or more of said first type pixels and every one or more of said second type pixels being staggered at said intersections, wherein each of said first type pixels is connected to

Art Unit: 2629

one of said data lines and two successive ones of said gate lines (fig. 5A, 71), and each of said second type pixels is connected to one of said data lines and one of said gate lines (fig. 5A, 73, from col. 3, line 59 to col. 4, line 5).

As to claim 15, Kwon teaches a first pixel capacitor including liquid crystal; and first and second thin film transistor connected in series between one of said data lines and said first pixel capacitor, said first and second thin film transistors having respective gates connected to two successive ones of said gate lines (fig. 5A, items 71a-71b), each of said second type pixels comprising:

a second pixel capacitor including liquid crystal; and

third and fourth thin film transistors connected in series between one of said data lines and said second pixel capacitor, said third and fourth thin film transistors having respective gates connected to one of said gate lines (fig. 5A, items 73a-73b, from col. 3, line 59 to col. 4, line 5).

As to claim 16, Kwon teaches a first pixel capacitor including liquid crystal; and first and second thin film transistors connected in series between one of said data lines and said first pixel capacitor, said first and second thin film transistors having respective gates connected to two successive ones of said gate lines (fig. 5A, items 71a-71c, 73a-73c), each of said second type pixels comprising: a second pixel capacitor including liquid crystal; and a third thin film transistor connected between one of said data lines and said second pixel capacitor, said third thin film transistor having a gate connected to

one of said gate lines, an ON resistance of said third thin film transistor being equivalent to an ON resistance of said first and second thin film transistors (fig. 5A, items 73a-73b, from col. 3, line 59 to col. 4, line 5).

***Allowable Subject Matter***

2. Claim 1-11,17-26,29-35 are allowed.

Relative to independent claims 1,17,20,29 the major difference between the teaching of the prior art of record (Kwon) and the instant invention is that a gate line driver circuit, connected to said gate lines, for scanning two first successive ones of said gate lines for writing first video data and two second successive ones of said gate lines for writing first black data in a first selection period and for scanning a preceding one of said first successive gate lines for writing second video data and a preceding one of said second successive gate lines for writing second black data in a second selection period; and a data line driver circuit, connected to said data lines, for supplying said first video data and said first black data to said data lines in said first selection period and for supplying said second video data and said second black data to said data lines in said second selection period.

Claims 2-11,18-26,30-35 depend on claims 1,17,20,29.

***Telephone Inquire***


Art Unit: 2629

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS  
10.05.07



RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNICAL CENTER 2600